Response under 37 C. A. 1.116 Applicant: Maria Castellanos et al.

Serial No.: 09/944,919 Filed: August 31, 2001 Docket No.: 10007912-1

Title: METHOD AND SYSTEM FOR MINING A DOCUMENT CONTAINING DIRTY TEXT

IN THE CLAIMS

No claims presently being amended or cancelled, the claims remain as follows:

1. (Previously Presented) A computer-implemented method for mining a document containing dirty text comprising:

removing an instance of dirty text within said document to produce a cleaned document having a content; and

performing a data mining operation on said cleaned document thereby deriving relevant information from said cleaned document and providing a summary of the content of said document.

- 2. (Original) The method for mining a document containing dirty text as recited in Claim 1, wherein said removing further comprises replacing an instance of dirty text with a standard term.
- 3. (Original) The method for mining a document containing dirty text as recited in Claim 1, wherein said removing further comprises removing an instance of computer code from said document.
- 4. (Original) The method for mining a document containing dirty text as recited in Claim 1, wherein said removing further comprises removing a table from said document.
- 5. (Original) The method for mining a document containing dirty text as recited in Claim 1, wherein said performing a data mining operation further comprises identifying a sentence within said cleaned document by identifying a beginning and an end of said sentence.
- 6. (Original) The method for mining a document containing dirty text as recited in Claim 5, wherein said performing a data mining operation further comprises scoring and ranking said sentence.

Response under 37 C. R. 1.116

Applicant: Maria Castellanos et al.

Serial No.: 09/944,919 Filed: August 31, 2001 Docket No.: 10007912-1

Title: METHOD AND SYSTEM FOR MINING A DOCUMENT CONTAINING DIRTY TEXT

7. (Original) The method for mining a document containing dirty text as recited in Claim 6, wherein scoring said sentence further comprises:

selecting scoring techniques operable for summarizing non-narrative, grammatically incorrect text;

selecting scoring techniques operable for summarizing narrative, grammatically correct text; and

using said scoring techniques to score said sentence.

- 8. (Original) The method for mining a document containing dirty text as recited in Claim 7, wherein said method further comprises generating a summary derived from said scored and ranked sentences.
- 9. (Original) The method for mining a document containing dirty text as recited in Claim 1, wherein said method further comprises selecting a text mining component based upon said data mining operation to be performed.
- 10. (Original) The method for mining a document containing dirty text as recited in Claim 1, wherein said method further comprises customizing said method by adjusting a parameter value.
- 11. (Previously Presented) A computer system comprising:
 - a bus;
 - a memory unit coupled to said bus; and
- a processor coupled to said bus, said processor for executing a method for mining a document containing dirty text comprising:

producing a cleaned document having a content comprising performing a general cleaning of said document by removing an instance of dirty text within said document including instances of misspelling and grammatical errors, and performing a domain and task specific cleaning of said document including removing instances of computer code and tables to produce a cleaned document; and

Response under 37 C. A. 1.116 Applicant: Maria Castellanos et al.

Serial No.: 09/944,919 Filed: August 31, 2001 Docket No.: 10007912-1

Title: METHOD AND SYSTEM FOR MINING A DOCUMENT CONTAINING DIRTY TEXT

performing a data mining operation on said cleaned document including providing a summary of the content of said document.

12. (Previously Presented) The computer system as recited in Claim 11, wherein said removing further comprises replacing an instance of dirty text with a standard term.

13.-14. (Cancelled)

15. (Original) The computer system as recited in Claim 11, wherein said performing a data mining operation further comprises identifying a sentence within said cleaned document by identifying a beginning and an end of said sentence.

16. (Original) The computer system as recited in Claim 15, wherein said performing a data mining operation further comprises scoring and ranking said sentence.

17. (Original) The computer system as recited in Claim 16, wherein scoring said sentence further comprises:

selecting scoring techniques operable for summarizing non-narrative, grammatically incorrect text;

selecting scoring techniques operable for summarizing narrative, grammatically correct text; and

using said scoring techniques to score said sentence.

- 18. (Previously Presented) The computer system as recited in Claim 17, wherein said method further comprises generating the summary derived from said scored and ranked sentences.
- 19. (Original) The computer system as recited in Claim 11, wherein said method further comprises selecting a text mining component based upon said data mining operation to be performed.

Response under 37 C. ... R. 1.116 Applicant: Maria Castellanos et al.

Serial No.: 09/944,919 Filed: August 31, 2001 Docket No.: 10007912-1

Title: METHOD AND SYSTEM FOR MINING A DOCUMENT CONTAINING DIRTY TEXT

20. (Original) The computer system as recited in Claim 11, wherein said method further comprises customizing said method by adjusting a parameter value.

21. (Previously Presented) A computer-useable medium having computer-readable program code embodied therein for causing a computer system to perform the steps of:

removing an instance of dirty text within said document to produce a cleaned document having a content; and

performing a data mining operation on said cleaned document to provide a summary of said content.

- 22. (Original) The computer-useable medium of Claim 21, wherein said removing further comprises replacing an instance of dirty text with a standard term.
- 23. (Original) The computer-useable medium recited in Claim 21, wherein said removing further comprises removing an instance of computer code from said document.
- 24. (Original) The computer-useable medium recited in Claim 21, wherein said removing further comprises removing a table from said document.
- 25. (Original) The computer-useable medium recited in Claim 21, wherein said performing a data mining operation further comprises identifying a sentence within said cleaned document by identifying a beginning and an end of said sentence.
- 26. (Original) The computer-useable medium recited in Claim 25, wherein said performing a data mining operation further comprises scoring and ranking said sentence.
- 27. (Original) The computer-useable medium recited in Claim 26, wherein scoring said sentence further comprises:

selecting scoring techniques operable for summarizing non-narrative, grammatically incorrect text;

Response under 37 C. R. 1.116
Applicant: Maria Castellanos et al.

Serial No.: 09/944,919 Filed: August 31, 2001 Docket No.: 10007912-1

Title: METHOD AND SYSTEM FOR MINING A DOCUMENT CONTAINING DIRTY TEXT

selecting scoring techniques operable for summarizing narrative, grammatically correct text; and

using said scoring techniques to score said sentence.

28. (Original) The computer-useable medium recited in Claim 27, wherein said method further comprises generating a summary derived from said scored and ranked sentences.

29. (Original) The computer-useable medium as recited in Claim 21, wherein said method further comprises selecting a text mining component based upon said data mining operation to be performed.

30. (Original) The computer-useable medium as recited in Claim 21, wherein said method further comprises customizing said method by adjusting a parameter value.

31. (Previously Presented) A computer-implemented method for mining a document containing dirty text comprising:

producing a cleaned document having a content comprising performing a general cleaning of said document by removing one or more instance of dirty text within said document including instances of misspelling and grammatical errors, and performing a domain and task specific cleaning of said document including removing instances of computer code and tables; and

performing a data mining operation on said cleaned document, including determining a sentence score for each sentence of said cleaned document and ranking the sentences from highest to lowest based on the sentence score;

generating a summary of the content of the document using the highest ranked sentences.

32. (Previously Presented) The method of claim 31, wherein determining a sentence score for each sentence includes applying a keyword technique to each sentence.

Response under 37 C. R. 1.116 Applicant: Maria Castellanos et al.

Serial No.: 09/944,919 Filed: August 31, 2001 Docket No.: 10007912-1

Title: METHOD AND SYSTEM FOR MINING A DOCUMENT CONTAINING DIRTY TEXT

33. (Previously Presented) The method of claim 32, wherein determining a sentence score further comprises applying a location technique to each sentence.

- 34. (Previously Presented) The method of claim 32, wherein determining a sentence score further comprises applying a semantic similarity technique to each sentence.
- 35. (Previously Presented) The method of claim 34, wherein the semantic similarity technique comprises:

generating a vector associated with each sentence; and

comparing each vector to every other vector, including defining a cosine of an angle between two vectors and using the cosine of the angle between two vectors to determine whether sentences represented by the two vectors are semantically related.